



# County of Fairfax, Virginia

## MEMORANDUM

DATE: *December 6, 2021*

TO: Board of Supervisors

FROM: Bryan J. Hill  
County Executive *B. Hill*

SUBJECT: Resilient Fairfax, Climate Adaptation and Resilience Plan: Second Update

This memorandum provides an update on activities related to Resilient Fairfax, the county's climate adaptation and resilience plan, since the initial Resilient Fairfax planning update memorandum dated June 1, 2021, and presentation at the [Board of Supervisor's Environmental Committee meeting on June 15, 2021](#).

### **Background**

As detailed in the June 1, 2021 memorandum, the Resilient Fairfax initiative will help the county better understand and prepare for the impacts of climate change on our communities, services, and infrastructure. These climate hazards may include, but are not limited to, changes in temperature patterns, precipitation patterns, extreme weather events, flooding, sea level rise and other impacts. The process and plan will examine how the county government, utilities and authorities, businesses, service providers, infrastructure managers, and residents can prepare for and bolster their resilience to these impacts.

The Resilient Fairfax planning process is conducted using the equity lens of One Fairfax. The planning process is also being conducted in close coordination with related plans and programs including the [Northern Virginia Hazard Mitigation Plan](#), regional and state climate resilience efforts, county flood mitigation efforts, and county climate health initiatives. The active involvement of 20 county departments and agencies on the Resilient Fairfax Planning Team helps to ensure this alignment.

As described below, the full Resilient Fairfax scope of work includes four major tasks to be undertaken between February 2021 and June 2022. The planning process is being managed by the Office of Environmental and Energy Coordination (OEEC), supported by a consultant team that includes the Cadmus Group and its subconsultants WSP and Nspiregreen. The process also includes engagement of the public and three stakeholder groups. Once completed, the plan is scheduled to be presented to the Board at a summer 2022 Environmental Committee meeting, and, if endorsed, presented for adoption at a fall 2022 Board of Supervisors meeting.

### **Stakeholder and Community Engagement**

The Resilient Fairfax planning process is led by the OEEC. Stakeholder and community input is a critical component of the planning process to develop feasible strategies and encourage buy-in from these groups when the county moves to the implementation phase. This planning process is aided by the expertise of the stakeholder groups listed below. Community engagement is also part of each phase of the planning process.

- The **Planning Team** is composed of technical leads and subject matter experts from 20 relevant county departments and agencies. The Planning Team is responsible for reviewing and providing technical feedback on deliverables and assisting OEEC in coordinating between Resilient Fairfax and related initiatives of other county departments.
- The **Infrastructure Advisory Group (IAG)** is composed of representatives from utilities and authorities, building industry groups, transportation commissions and authorities, and regional partners. The IAG is responsible for reviewing and providing feedback on key deliverables to help ensure that the plan is in alignment with the expertise of infrastructure managers.
- The **Community Advisory Group (CAG)** is composed of representatives from each of the nine magisterial districts, environmental, religious, non-profit, and civil rights organizations, businesses, residential communities, and the county's boards, authorities, and commissions. The CAG is responsible for reviewing and providing feedback on key deliverables to help ensure the plan is in alignment with the needs and experiences of the community.

### **Scope of Work and Status**

Since the last update in June, the Resilient Fairfax planning effort has focused on the development of a vulnerability and risk assessment (Task 2) and is now transitioning to the development of adaptation and resilience strategies (Task 3). The schedule was adjusted for these tasks to provide additional time for the stakeholder groups and the community to review and provide feedback on key deliverables. A final draft of the Resilient Fairfax plan (Task 4) is still on schedule to be presented to the Board for endorsement at a summer 2022 Environmental Committee meeting.

- **Task 1 – Project Initiation** (February 2021 – May 2021). This task is complete. Task 1 included project initiation and project management tasks with the consultant team, and establishment of the Planning Team, Infrastructure Advisory Group, and Community Advisory Group. A kickoff meeting was held with each group and the public to introduce Resilient Fairfax.
- **Task 2 – Vulnerability and Risk Assessment** (April 2021 – November 2021). This task includes three major technical document deliverables as summarized below. These documents have been drafted and reviewed by the stakeholder groups and community. These documents will be finalized and integrated into the final Resilient Fairfax plan to be prepared under Task 4.

- Climate Projections Report: This report addresses the question, “What climate conditions will we face in 2050 and 2085?” This report focuses on the climate data itself, rather than the impacts of those conditions. Climate projections were developed based on downscaled climate science data, supplemented by existing regional and local information. Climate projections were assessed for two emission scenarios: low emissions (RCP 4.5) and high emissions (RCP 8.5), and for six climate hazards: extreme heat, extreme cold, heavy precipitation and inland flooding, severe storms and wind events, coastal flooding, and drought.
- Vulnerability and Risk Assessment: This report addresses the question, “Given these projections, where are we vulnerable?” The county-wide climate vulnerability and risk assessment uses the climate projections to evaluate the potential impacts of the projected climate hazards on our communities, services, and infrastructure. Seven sectors and 27 sub-sectors were analyzed for their vulnerabilities to each of the climate hazards. Vulnerability was based on each sub-sector’s exposure, sensitivity, and adaptive capacity to each climate hazard. These sectors included populations, public services, buildings, water infrastructure, energy and telecommunications infrastructure, transportation infrastructure, and natural and cultural resources. When analyzing the populations sector, a particular focus was given to the county’s “frontline” or most vulnerable communities, and their ability to prepare for, respond to and adapt to projected climate impacts.
- Audit of County Policies, Plans, and Programs: The third subtask included an audit of existing county policies, plans, and programs that are relevant to climate adaptation and resilience. The purpose of this audit was to determine where the county is doing well in terms of resilience, and where there are gaps or opportunities for improvement. Over 100 policies, plans, and programs were evaluated.

The assessment methodology, data collection, and analyses for all three deliverables were coordinated with input from the stakeholder groups and the public. In addition to meetings with the Community Advisory Group, Infrastructure Advisory Group, and Planning Team, this task included a public meeting held on June 15<sup>th</sup> and a corresponding public survey. A second public meeting was held on October 14<sup>th</sup> to review the draft results and gain additional input.

- Task 3 – Adaptation and Resilience Strategies (October 2021 – February 2022). Based on the outcomes from Task 2, adaptation and resilience strategies and actions are being drafted, assessed, and prioritized with input from the stakeholder groups and community. An additional round of Stakeholder meetings as well as a public meeting were added to enable additional engagement on this task. The strategies are being developed across sectors. Once prioritized, the strategies will be incorporated into an Implementation Roadmap that identifies leads, partners, and timeline for each strategy.
- Task 4 – Plan Composition and Outreach Materials (January – June 2022). The results of Task 2 and 3 will be summarized and incorporated into a draft Resilient Fairfax plan under

this task. The Board of Supervisors, stakeholder groups, and the greater community will be able to review a draft of the compiled plan and provide feedback. A final draft of the plan will be presented to the Board for endorsement at a summer 2022 Environmental Committee meeting. In addition to the plan itself, Task 4 will include outreach materials to share key information with the public, including fact sheets and interactive online maps and resources.

**Next Steps**

The OEEC will provide updates to the Board as the plan proceeds through the tasks and engagement processes described above. The next update will focus on the draft Implementation Roadmap of adaptation and resilience strategies (Task 3), and the Resilient Fairfax plan development and public review process (Task 4). Additional information on Resilient Fairfax is available on the project web site at <https://www.fairfaxcounty.gov/environment-energy-coordination/resilient-fairfax>.

If you have questions, please contact Kambiz Agazi at 703-324-1788 or via email at [Kambiz.Agazi@fairfaxcounty.gov](mailto:Kambiz.Agazi@fairfaxcounty.gov).

cc: Rachel Flynn, Deputy County Executive  
Kambiz Agazi, Director, Office of Environmental and Energy Coordination